UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

NANCY BROOKS AND JO		X	
	Plaintiffs,	:	Civil Action No. 05-10994-WGY
v.			
AIG SUNAMERICA LIFE A	SSURANCE	:	
COMPANY,		:	
	Defendant.	:	
		X	
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AFFIDAVIT OF GAVIN D. FRIEDMAN

STATE OF CALIFORNIA)
) ss.
LOS ANGELES COUNTY)

GAVIN D. FRIEDMAN, being duly sworn, deposes and states as follows:

- 1. I am a member of the Bar of the State of California and am Associate General Counsel of AIG SunAmerica Life Assurance Company ("AIG SunAmerica").
- 2. I make this affidavit in further response to the Court's Order dated November 29, 2005 in the above-captioned action. I have personal knowledge of the statements contained herein or, where indicated, upon information and belief and, if called as a witness, I would testify competently thereto.
- 3. After learning of the Court's November 29, 2005 Order, I began a search to locate the document referenced in paragraph 13 of the policy issued to Donald L. Silverman on or about May 1, 1984 (the "Policy"). I understand that this document is the Actuarial Memorandum that would have been filed by Mutual Benefit Life ("MBL") prior to AIG SunAmerica acquiring the Policy in 1999.

- I understand that the Policy is a restructured policy that Mr. Silverman 4. received in 1994 during the rehabilitation of Mutual Benefit. The restructured policies, including Mr. Silverman's Policy, are referred to as Form C193 ("C193").
- 5. To date, neither I nor the people assisting me have been able to locate the document referenced in paragraph 13 of the Policy. Our search included an extensive review of AIG SunAmerica's files. We also contacted the Massachusetts Division of Insurance, which informed us that it only maintains such actuarial memoranda for a period of 2 years, and that it does not have a copy of the Actuarial Memorandum filed in connection with the Policy.
- During the search, we also contacted other states in which the C193 6. restructured policies were delivered. The Texas Department of Insurance informed us that it had a copy of the Actuarial Memorandum filed by MBL in connection with the C193 policies.
- 7. Attached hereto as Exhibit A is a true and correct copy of the Actuarial Memorandum on file with the Texas Department of Insurance. I understand that Exhibit A is the document filed by MBL regarding the C193 form of policy.

Dated: December 29, 2005

VIRGINIA N. PUZON Commission # 1507027 Notary Public - California Los Angeles County

Sworn and subscribed to

before me this 29 day of December, 2005.

My Commission expires:

EXHIBIT A

Actuarial Certification Policy Forms C193 and JL93

I hereby certify that the cash surrender values of policy forms C193 and JL93 will always equal or exceed the minimum values required by law, with or without riders attached.

Gary J. Strunk, FSA, MAAA Associate Actuary

THE MUTUAL BENEFIT LIFE INSURANCE COMPANY

ACTUARIAL MEMORANDUM

ADJUSTABLE LIFE, FORM C193

I. DESCRIPTION OF POLICY CHARACTERISTICS

This policy is a Flexible Premium Universal Life Insurance Policy which untures on the maturity date specified at issue.

A. Death Benefits

Insurance on the life of the insured is integrated with the Cash Value of the policy by means of the choice at issue of the Specified Amount and the Death Benefit Option.

Under Option A, the death benefit at any time is the greater of:

- (a) the Specified Amount, or
- (b) the Cash Value divided by the life net single premium on the guaranteed basis.

Under Option B, the death benefit at any time is the greater of:

- (a) the Specified Amount plus the Cash Value, or
- (b) the Cash Value divided by the life net single premium on the guaranteed basis.

Alternative (b) assures compliance with requirements of current federal tax statutes with respect to definition of life insurance.

Promiums

The amount and schedule for payment of premiums are controlled by the owner. All presions may be subject to a premium expense charge expressed as a percentage of the gross premium.

C. Cash Values

The Cash Values are an accumulation at interest of net premiums. less any stipulated expense charges, and less the periodic charges for pure term insurance on the insured's life based on the net amount at risk. See Section III.

Paid-Up Nonforfeiture Benefits

If the policyholder stops paying premiums, the policy will be continued as extended insurance. The rates and method for calculating the cost of this insurance and the method of calculating Cash Values will be the same as those used while on a premium-paying basis. The coverage will continue as long as the Cash Value supports the monthly deductions for expenses and purchase of term insurance or until the maturity date, whichever is sooner. The owner may resume premium payments at any time while the policy is still in force.

Maturity Benefit

If the insured is alive and the policy is still in force, the policy matures on the specified maturity date at which time the net Cash Value becomes payable. Upon request by the owner, we will defer maturity to a later date. The death benefit will then be equal to the Cash Value, accumulated with interest.

T. Plexibility

Depending upon the relationship of the planned premium, Specified Amount, Cash Value, and Death Benefit Option, continuation of the coverage period could range from a very short term of coverage to the full period ending on the naturity date. The naturity date may be changed while the policy is in force to any policy anniversary after the end of the tenth policy year and prior to the anniversary mearest the insured's 100th birthday,

While the policy is in force after the first policy year, the owner may change the amount of planned future premiums and/or the Specified Amount. Decreases in the Specified Amount are permitted after the first policy year, but may not lower the Specified Amount of insurance below the minimum amount for which a new policy could be issued. Evidence of insurability is required for any increase in the Specified Amount of insurance.

II. BASIS OF VALUES

Interest

(Minimum cash values and reserves are based on the 1980 Commissioners Standard Ordinary Smoker/Mon-Smoker Mortality Table and Interest of 4% per year.)

The minimum guaranteed interest rate applied in the calculation of Cash Values under this policy is stated in the contract. The company may apply higher rates of interest in the calculation of Cash Values. One such higher rate of interest is applied to any excess of the Cash Value over the amount of any loan outstanding against the policy while a second such interest rate is applied to the portion of the Cash Value equal to any outstanding loan balance.

Because of the retrospective approach used to calculate Cash Values, the use of an interest rate greater than the guaranteed rate produces Cash Values greater than those which would be realized if the guaranteed rate is used.

Cost of Insurance

The guaranteed maximum cost of insurance rates applied in the calculation of Cash Values under this policy are stated in the contract. The company may use modified cost of insurance rates. applied in a uniform manner to all policies in a class, which produce lower costs of insurance. Use of such rates produces higher Cash Values than those calculated using the guaranteed rates. The classes to which a standard policy may be assigned, depending on the underwriting characteristics of the insured, are nine in number and are designated as: (1) Male Smoker, (2) Male Non-Smoker, (3) Male Aggregate, (4) Female Smoker, (5) Female Mon-Smoker, (6) Female Aggregate, (7) Unisex Smoker, (8) Unisex Mon-Smoker, and (9) Unisex Aggregate.

III. POLICY VALUE PORMULA

Retrospective Method

For this policy the ultimate plan of insurance at any point in time prior to the naturity date is unknown due to:

- (1) Freedom of choice given to the policyowner with respect to premium payments, death benefits and the maturity date:
- (2) The use of Cash Value interest rates greater than the guaranteed interest rate;
- (3) The calculation of monthly deductions using monthly cost of insurance rates less than the maximum guaranteed rates.

Therefore, to calculate policy values a retrospective method is used.

Definitions of Factors Involved in Calculation of Policy Value for Adjustable Life

- The number of months between the Policy Year Date and a Policy Processing Day.
- ICV_t -Cash Value on the Policy Processing Day (PPD) which is t months after the Policy Year Date (PYD).
- ECV_E = Cash Value at the end of the month whose PPD is t months after (PYD).
- The monthly expense charge, which is \$4. EXP =
- The monthly cost of insurance for the death benefit, which cor depends on the net amount at risk and which is deducted on the PPD which is t months after the PYD.

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- The guaranteed minimum policy value interest rate, 4%.
- The current cash value interest rate as declared from time to time.
- The cash value interest rate to be used for that part of the cash value which is equal to the amount of loan principal outstanding.
- The amount of loss principal outstanding on the last day of the policy month whose PPD is t months after the PYD.
- The gross amount of premiums received on or before the PPD which is (t+1) months after the PYD, but after the PPD which is t months after the PYD.
- The net premium corresponding to $G_{\underline{r}}$ and equal to $G_{\underline{r}}$ less the premium expense charge, which cannot exceed 7.5%.
- The monthly cost of insurance rate for the death benefit on the PPD which is t wonths after the PYD. The rate depends on age at issue, policy duration, sex, smoking habits, and rating class of insured. The maximum rates ere defined in Exhibit I.
- The Total Death Benefit calculated on the PPD which is t months after the PYD. For Option A, the Total Death Benefit is the greater of:
 - The Specified Amount, or
 - The Cash Value divided by the Life Net Single Premium for the insured's age, sex, and smoking habits. See Table of Net Single Premiums in Exhibit I.

For Option B, the Total Death Benefit is the greater of:

- 1) The Specified Amount plus the Cash Value, or
- 2) The Cash Value divided by the Life Net Single Premium for the insured's age, sex, and smoking habits. See Table of Net Single Premiums in Exhibit I.
- G_I,P_I The gross and not amounts of the first premium payment on the PYD.

Formulas for Cash Value Calculation

For t ≥ 1:

$$ECV_{t-1} = (ICV_{t-1} - L_{t-1})(1+i_{E})^{1/12} + L_{t-1}(1+i_{L})^{1/12} + P_{t-1}$$

$$COI_{t} = R_{t} \left[\frac{F_{t}}{(1+i_{G})^{-1/12}} - (EVC_{t-1} - EXP) \right]$$

$$ICV_{t} = ECV_{t-1} - EXP - COI_{t}$$

Due to the nature of the Adjustable Life policy, the measure of the nonforfeiture benefits is the Cash Value at the time that premium payments cease. The insurance coverage continues on the same basis as during the premium-paying pariod using the same cost of insurance and interest rates. So long as the policy does not lapse, the owner may resume premiums payments at any time.

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If the cash values in Section III are calculated using the guaranteed cost of insurance rates and the guaranteed interest rate, the resulting cash values will satisfy the minimum policy value requirement under the Standard Monforfeiture Law provided the additional monthly expense charges for the first policy year are less than the initial expense allowance defined in the law.

There is no additional expense charge for the first policy year, and the permitted initial expense allowance is \$10.00 per thousand plus 125% of the net nonforfaiture premium for the policy subject to a maximum of \$60.00.

Thus the policy values for this policy are at least as great as those required by the Standard Nonforfeiture Law.

1/12(q_1980 CSO) (1 - 1/12 q_1980 CSO) rounded to dollars and cents per \$1000,

where X is the insured's sge and q 1980 CSO is the annual mortality rate at age X according to the appropriate 1980 GSO Table. These rates assume that the monthly mortality rate is one-twelfth the annual mortality rate. For a policy issued in a rated class, these cost of insurance rates shall be multiplied by the basic policy rated class factor shown on page 3 of the policy.

Exhibit II shows the Net Single Premiums per \$1000, based on the appropriate 1980 CSO Table, and interest of 4% per year.

The Met Single Fremiums are for a whole life benefit assumed payable at the moment of death which is approximated by assuming payment at the middle of the year.

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17	0.17	0.13	0.14	0.09	0.08	0.08	0-15	0.12	0.13	ÿ 5
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17	6.19	0.14	0.16	0.09	0.68	6.69	0.17	0.13	9.14	197
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25	0.18	0.13	0.15	9.11	0.09	0.10	0.16	0.12	9.14	•
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27	9.17	0.12	0.14	9.12	0.10	0.16	0.16	0.12	0.13	
20	0.17	0.12	0.14	0.12	0.10	9.11	0.16	0.12	0.13	
29	y" 0.17	0.12	0.14	0.12	0.10	0.11	9.16	0.12	0.14	
30	0.18	0.12	0.14	0.13	0.10	0.11	0.17	0.12	0.14	
31	0.1B	0.12	0.15	0.13	0.11	0.12	0.17	0.12	0.14	
. 32	0.19	0.13	9.15	0.14	0.11	0.12	0.18	0.12	0.15	
33 34	0.20	0.13	0.16	9.15	0.11	0.13	0.19	0.13	0.15	
		0.13	0.17	0.16	0.12	0.13	0.20	0.13	0.16	
35	0.22	0.14	0.18	0.16	0.12	0.14	0.21	0.14	0.17	
36	0.23	0.15	0.19	0.17	0.13	0.15	0.22	0.14	0.18	
37	v.25	0.16	0.20	0.19	0.14	0.16	0.24	0.15	0.17	
38	0.28	0.17	9.Z2	0.21	0.15	0.17	0.26	0.16	0.21	
39	0.30	0.18	0.23	0.23	0.16	0.19	0.29	0.1B	0.22	
40	0.33	0.19	0.25	0.25	0.17	0.20	0.31	0.19	0.24	
41	0.36	0.21	0.27	0.28	0.19	0.22	0.35	0.20	0.24	
42 43	9.49	0.22	0.30	6.36	0.20	0.24	9.38	0.22	0.27	. 🗷
44	6.44	0.24	0.32	0.33	0.22	0.26	0.41	0.23	0.31	
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59	1.05	9.54	●.73	9.45	9.44	0.51	0.97			
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60	1.94	1.05	1.34	1.04	9.71	0.79	1.75	6.98	1.23	, ·
61	2.11	1.16	1.46	1.11	0.76	9.84	1.98	1.08	1.34	
62	2.30	1.29	1.69	1.20	0.83	0.91	2.07	1.19	1.46	
63	2.53	1.43	1.76	1.32	0.92	1.00	2,26	1.32	1.60	
54	2.77	1.59	1.93	1.45	1.92	1.11	2.48	1.47	1.76	
45	3.03	1.76	2.12	1.59	1.13	1,22	2.71	1.63	1.73	u
46	3.31	1.95	2.33	1.74	1.25	1.34	2.75	1.81	2.11	¥
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49	3.89	2.38	2.77	2.92	1.49	1.57	3.46	2.19	2.51	
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74	6.43	4.43	4.87	3.12	2.76	2.84	5.65	4.05	3.96 4.38	8
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76	7.65	5.45	5.91	4.35	3.52	3.59	6.72	5.00	5.33	
77	B 28	6.01	6.47	4.81	3.94	4.02	7.27	5.51	5.84	
78	8.70	4.58	7.04	5.30	4.40	4.47	7.82	6.05	6.37	
79	7.55	7.19	7.65	5.82	4.89	4.97	8.39	6.62	4.93	
80		7.87	8.31	6.40	5.46	5.53	9.01	7.25	7.54	
81	10.99	8.62	9.04	7.05	6.10	6.17	9.68	7.96	8.23	
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86	15.73	13.75	14.04	11.79	10.83	10.87	14.18	12.88	13.01	
87	16.70		15.17	12.89	12.04	12.09	15.15	14.06	14.16	
88	17.76	16.16	16.37	14.13	13.31	13.36	16.23	15.27	15.33	
89	18.81	17.41	17.58	15.32	14.67	14.71	17.30	16.52	14.56	
90	19.86	18.69	18.83	16.69	16.12	16.15	18.45	17.84	17.86	
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			,,,,,,	121.45	139.6	4 122.		26.86	165.7			42.68
20	177.36	14	13.82						10347	7 136.	23 1	44.97
21	182.46		R. 11	156.39	143.6	1 126.	25 1:	31.04	170.69			
SS	187.82	15	2.58	161.02	148.3	4 130,		35.35	175.75			51 . 38
23	193.43	1 4	7.77	165.82	153.2		71 1:	37.83	181.92			55.73
24	177.31	14	2.18	176.86	158.3		19 14	14.46	184.51		: <u> </u>	69.66
25	205.48	4	7.33	176.12	163.6	2 143.4		19.27	192.27			55.42
26	211.97	1 7 4 6 7	7 + 33	181.64	169.0	9 14B./		4.25	198.29		2 17	70.77
27	218.79	- 7	2.74	187.43	174.7	5 153.4	55 15	7.42	204.62			4.20
28	225.90	1/1	7.94	193.50	180.61	158.E		4.77			Z 18	71.86
29				199.84	186.69	164.2		0.34	211.23			7.78
35 °C	1985	196	7.38	203.45	192.98	169.7		4.08	218,14 225,34		0 19	3.76
39	241.96								250.24	196.3	6 20	0.40
31	249.09			213.33	199.49		6 19	2.94	202 00			
32	257.40	203		220.48	206.21	181.5		3.21	232.63	192.6		7.09
3	744 00	210		227.89	213.16	187.7		1.58	249.59	199.21		1.04
14	265.00	217		235.57	220.34	194.1			248.63	206.02		1.25
5	274.90 284.07	225		243.51	227.77	200.8			256.95	213.08	228	.72
16	293.52	233		251.71	235.42	207.72			265.54	220.40		. 43
7		241.		269.18	243.33	214.8			274.41	227.97		-41
8		249.		6B.91	251.46	222.19			283.55	235.80		.64
		257.		77.88	259.78	229.76	237		292.7.	243.89		-12
	323.46	266.	6B 2	87.19	268.39	237.55	245		302.59	252.25		.84
	222 02							•51	112,48	269.85	278	• 91 🔆 .
	333.93	275.		76.57	277.01	245.56	253	.40 -	20 ==			
	344.62	285.	19 3	06.2B	285.89	253.78				269.71	288	
	355.53	274.		16.22	294.91	262.23	270		32.71	278.83	297	42
	366.64	304.	51 3	26.39	304.10	270.88	279,		43.43	288.21	307	96 1/2 €
$X \in \mathbb{R}^3$	377.76		78 3:	36.81	313.47	279.78		- ·		297.86	316.	74
	389.48	25.2	4 34	17.46	323.03	288.93	288.			307.77	327:	95 🔆 💮
		335.9		8.35	332.78	298.32	297.	<u> </u>		317.97	337.	37
		47. 6		9.48	342.74	397.99	306.		37.47	328.44	347.	
	25.18 3	58.3	1 36	0.87	352.91	317.92	316.		78.94 3	339.19	358.	
	37.48 3	147.9	2 39	2.50	363.29	328.10	325.			50.22	347.	
750							336.	va 42	2.54 3	61.54	301.	15
		4-13-4-1 3-3-4-1				• •					•	2.4

1988 CSO NSP AT 4 Z

			MALE									Ţ.
	9E 81		ONSH	. AGGR	:		emale Ionsh		<u>.</u>		UNISE	* :
	50 440					nicity p	URAH	AGG	R	8KOK	NONS	H AGER
	50 449. 51 462.			404.38		.89 33	8.58	346.3				
	175			416.51 42 0.8 5	384	-67 34	7.31	354.91		4.61 6.90	373.15	
	J 488.	45 411		725.85 441.40		•71 36	●•3Z	367.72	2 45	7.31	385.04	
	501.			454.13			1.59	378.78	471		407.48	
	5 514.	58 445		147.41	418 429		3.10	390.04	484		422.36	
3		71 451		180.64	441		1.88	401.58	497	.21	435.28	441.16
. 5		8789472		73.21	453.		5.91	413.34	509	.78	448.41	466.47
5			·36 5	506.53	465.		·24	425.37	522	.81	461.76	477.36
5	7 567 .	34 590		20.00	478		*83	437.70	595	•71	475.33	472,43
6							100	450.39	548	.69 4	189.13	505.48
61				33.62	491.	27 458	. 15	463.43				
6				47.36	504.	97 47 <u>1</u>		476.82	561 . 574 .		93.14	519.11
63	620.6			61.21	517.	95 485		490.53	588.		17.33	532.71
44	693.7			75.13	531.	54 500	94	504.51	601.		31.76	546.44
65			52 6	89.06	545.4	12 514	48	518.67	614.		46.2 0 69.77	569.27
\$ 56		8 602.	19 4	14.97 14.35	559.2		05	532.97	627		75.37	574.14
67	672.2	0 616.		19.49	573.1 587.0		76	547,40	640.		89.98	588.62 601.80
- 48	684.6	8 631.	49 .44	4.49	401.0			561.97	652.			615.74
69	697.0	4 646.	69 65	8.27	415.3	7 573. 3 588.		576.73	665.	20 61	17.22	629.59
	A CONTRACTOR				41010	. Jos.	PA 5	591.73	677.6	5 6 63	3.86	443.48
70 71	707.3			2.02	629.7	9 694.	37 4	0 7.00				
72	721.4 733.3		14 68	5,70	644.5	620.		22.50	690.0	8 64		657.38
73	745 6	087.	30 A9	9.24	459.3	435.		38.15	702.4 714.6			671.27
74	756.29	703.			674.07	651.7		53.84	774.6			685.00
75	767.18	717.) 730.5		5.59	498.47			69.44	738.3			698.73
76.	777.58		5 756	3.23	702.99		4 6	B4.85	749.6			712.11 725.17
77 .	707.52		4 744	2.45	716.99	_,_,	18 7(00.02	760.5			737.87
78	797.07	768.3		:	730.66 744.94		1 71	14.92	771.07			50.23
79 .)	803.35				757.19	· ~ ~ ~ ~ ~		29.57	781.25	758	1.60 7	62.29
	38 12 12 N			•••	13/117	742.9	5 74	14.01	791.20	770		74.12
80	815.41	792.0		-16	770.15	757.3) ye	8.24	***			
81 32	824.25		893	-97	782.89	771,4		2.24	800,78			85.74
83	832.33		9 317		795.36	785.2		5.92	810.61 929.94			97.20
. 34	841.09 848.73		827	- 68	897.46	798.59		9.17	829.20	894 817	• 67 80	98.30
85	856.32				819.11	811.46	81	1.70	838.01	828		7.21
36	863.31	844.96 854.02	. 1.4		839.13	823.65	824	4.06	844.39	838.		19.51
87	870.01	862.59		<u> </u>	840.69	835.30		5.64	854.43	848.	46 84	19.73
88	876.59	870.74	871.		850.48 860.37	844,42		5-68	862.17	857.	66 85	7.73
. 89	883.02	878.62	877.	-	869.67	857.05 867.30	,	. 25	869.79	866.	45 86	6.59
		Section in		,		407 149	467	.44	877.26	874.		5.01
90 91	889.47	886.37			878.96	877.26	B77	.34	004 **	-		والمرازين ومشر
92	876.14	894.16	B94.	38 . 8	988.17	887.08	687		884.80 892.52	883.		3.33
73	903.32 911.31	902.19	902.	-	397.53	896.94	896		700.62	891.		1.40
74	720.24	716.71 720.04			707.26	907.04	907		707.38	700.:	30 7 4 1	.31
95	730.43	730.43	920.	0/ 9	717.65	917.65	917	.65	918.99	919.1		7.10
76	941.95	941.95	941.9		29.01	929.01	929	.01	729.70	929.5		
97	754.50	734.50				941.20	941	·20 9	941.60	941.7		.43
78	967.74	767.74	747.7	74 9		954.25 967.61	954		754.42	954.4	2 954	.37
99	980.58	780.58	789.5		80.58	988.SR	967. 980.		67.60	967.6		.27
	1000 00 -								84.58	980.5		•56
	1000.00 1	466.99	1000.0	0 10	99.89 1	****	1000.	99 1 4	00.00 1		- 1444	
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							Exhib	# T
			198a r	 An cimba	NTEED COI		PRJ.F	J.el 2
	MAL			JO GUNKA	WIEED COI		×.	
SMOI	_	1 AGGR	BHOK	FEMAL NONS		SHO	UNISE K NONS	
9.09 9.09			9.24	0.2	0.24/	/ A a		· "C
9.08			9.07	9.07	0.67	9.3; 9.99		
0.08	8.48		9.07		9.97	0.00		
0.00			9.97 9.86		~.~,	9.08	. 0.0	
0.08		6.68	9.06			P.08	(0.0	B 0.00
0.07 0.07	Contract of the Contract of th		0.06			9.07		9.07
●:96	0.07 0.06	0.07	0.06	0.06		9.97 9 .97		
0.06	0.06	0.06 0.06	6.66	0.06	9.06	9.96		
		100	0.03	0.06	0.03	9.06		
64.64	9.96	9.96	0.06	0.96	0.06		• .	1994
9.96 9.97	0.06	9.96	0.06	0.06	0.06	9.96	9.06	
0.00	0.07	0.07	9.06	0.06	0.06	0.06 0.07	9.06	
0.10	/ 0.10 / 0.10	9.08 / 9.10 /	9.96.	0.06	9.06	6.08	9.97 9.08	9.67 9.68
0.14	0.11	0.11	9.97	9.97 9.97		9.09	/ 0.09	
0.16		0.13	6.68	9.07	9.97	0.13/		0.10
0.17	0.13	0.14	0.09	6.68	0.08 0.08	0.14	0.11	0.1Z
0.18 9.19	0.13	0.15	0.09	0.08	0.08	0.15 9.16	9.12	0.13 jj
	0.14	9.16	0.07	9.08	6.09	9.17	0.12 0.13	7.145
9.19	9.14	9.16	0.10	A AA	4			
0.19	9.14	0.16	0.10	0.08 0.09	0.07 0.07	0.17	0.13	9.15 3
0.17 0.19	0.14	9.16	9.10	0.09	0.07	0.18 0.17	0.13	0.152
9.18	0.13 0.13	0.16	0.10	0.69	0.09	0.17	0.13 0.13	0.14
0.18	0.13	9.15 9.15	9.11	9.69	0.10	0.17	0.12	0.14 j
0.17	0.12	0.13	0.11 0.11	0.09	0.10	0.16	0.12	0.24
0.17	0.12	0.14	0.12	0.09 0.10	0.10 0.10	0.16	0.12	0.14
9.17	0.12	0.14	0.12	0.10	0.10 9.11	0.16 0.16	0.12	0.13
0.17	0.12	0.14	0.12	0.10	0.1;	0.16	0.12 0.12	0.13
9.18	0.12	9.14	A. 15				~~44	0.14
0.18	0.12	0.15	0.13 0.13	0.10 0.11	0.11	0.17	9.12	0.14
6.19	0.13	0.15	0.14	0.11	0.12 9.12	9.17	0.12	0.14
0.20 0.21	0.13	0.16	0.15	0.11	0.13	9.18 9.19	0.12	0.15
0.22	0.13	0.17	9.16	0.12/	0.13	0.20	0.13 9.13/	0.15 0.14
0.23	9.15	0.18° 0.19	9.16 9.16 9.17	0.12	0.14	0.21/	0.14	0.17
v.25	9.16	0.20	0.17	0.13 0.14	0.15	0.22	0.14	0.18
0.28 0.30	0.17	9.22	0.21	0.15	0.17	0.24 0.26	0.15	0.17
	9.18	0.23	0.23	0.16	0.19	0.20	0.16 0.18	0.21
0.33 0.36	0.19	0.25	0.25	A 4~				0.22
	0.21	0.27		0.17 0.19	0.28	0.31	0.19	0.24
0.40	9.22	0.30			0.22 0.24	0.35 A 35	0.20	0,26
0. 44 0. 48	0.24	0.32	0.33	0.22	0.26	0.38 0.41	0.22 0.23	0.29
0.70	0.26 0.28	6.35 6.38			9.28		0.25	9.31
9.57	0.30	0.41			6.3 6	0.50	0.27	0.34
9.62	●.32	0.44		_	0.32 0.34			9.37
0.67		0.48			0.34 0.36			0.42 0.45
.73	• • • • • • • • • • • • • • • • • • • •	0.52		.33				

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N_{ij}					••				3e 2.f2
				1980 (380 GUAR	ANTEED CO	I	P.	3 c ~ • T ~
AGE	***	HAI			FEMA	4 67			
HUE	SHO	K NONS	em aggr	SMO	K NON			ISINU	
50	9.7	9 6.4		1	•	on ngai	` 5n	OK NONS	im Aggr
51	9.87			9.5		35 . 0.41	9.	74 0.4	la
. 52	9.9	5 6.4		9.5 9.6			9.1		
53 54	1.05		4 0.73	9.6			• • • • •	B9 0.4	
55	1.15 1.26			0.7					2 0.48
54	1.38			9.70	9.5	6.59			
57	1.51	9.7		9.84 9.89		55 0.63	1.2		
. 58 :: 59	1.64	9.8						B 0.75	
37	1.78	9.94		6.99			1.5	9.82	1.05
60	1.94		1			,	1.6	2 , 0.96	1.13
61	2.11	1.0	1.34	1.04			1.7	5 0.98	1.23/
୍ଷ ବହ	2.30	1.29		1.11 1.20	9.7		1.9	1.08	
. 63 54	2.53	1.43	1.76	1.32	0.8 0.92		2.0	7 1.19	1.46
- 65 - 65	2.77 3.03	1.59		1.45	1.02		2.26 2.46		1.69
- 66	3.31	1.76 1.95		1.59	1.13	1.22	2.71		
67	3.60			1.74	1.25	1.34	2.75		1.93 2.110
68	3.89			1.89 2.02	1.37 1.49		3.20	1.99	2.31
. 69	4,21	2.62	3.02	2.17	1.62		3,46		2.51
70	4.56	9.00				4170	3.73	2.41	2.733
71	4.95	2.89 3.25	3.30 3.62	2.33	1.77		4.02	2.65	2.973
72	5.37		3.99	2.54 2.80	1.95		4.35	2.97	3.242
73 · · · · · · · · · · · · · · · · · · ·	5.89	3.97	4.41	3.12	2.17 2.44	2.24 2.52	4.74	3.25	3.58
75	6.43 7.03	4.43	- 1 -	3.49	2.76	2.84	5.17 5.65	3.63 4 .05	3.964
76	7.65	4.92 5.45	5.38	3.90	3.12	3.20	6.18	4.51	4.387
77 🗽	8.28	6.01	5.91 6.47	4.35 4.81	3.52	3.59	6.72	5.00	5.33
78	8.90	4.58	7.04	5.30	3.94 4.40	4.02	7.27	5.51	5.84
79	7.55	7.19		5.82	4.89	4.47 4.97	7.82	4.05	6.37
80	10.24	(† 17.) 1. 1. 1. 1. 1. 1. 1. 1. 1.		_		4077	8.39	6.62	6.93
81	10,99	7.87 8.62	8.31 7.04	6.40	5.46	5.53	9.01	7.25	7.54
82	11.82	9.47	9.87	7.85 7.80	6.10	6.17	9.68	7.96	8.23
83 84	12.75	10.42	10.80	8.65	6.85 7.71	6.91	10.44	8.76	9.01
85	13.73	11.47	11.83	9.45	8.66	8.73	11.29 12.23	9.68	9.90
86	15.73	12.59 13.75	12.91	10.45	9.71	9.77	13.18	10.68/ 11.76	10.68
B7		14.95	14.04 15.17	11.79	10.83	10.89	14.18	12.88	13.61
88	17.76	16.16	16.37	12.89 14.13	12.04	12.09	15.15	14.06	14.16
39	. 18.81	17.41	17.50		13.31 14.67	13.36	16.23	15.27	15.33
? •					27107	14.71	17.30	16.52	16.56
	19.86 20.94	18.69	18.83	16.69	16.12	16.15	18.45	17.84	17.86
72 73	22.07	21.52	20.15 21.58		17.69	17.71	19.68		19.24
3	23.57	23.16	23.20		19.42	19.44	21.01		20.77
2	25.48	25.26	25.28		21.40 23.83	21.41	22.62	22.53	22.50
74 75 76	28.27	28.27	28.27		27.16	23.83 27.16	24.69 27.72		24.71
7		33.11	33.11	32.32	92.32	32.32	32.71		27.93 32.79
8.		41.69 58.01	41.68 58.01	41.21	41.21	41.21			11.46
9		70.71	90.91	57.81 5	57.81 99.91	57.81	57.89	57.94 .	57.76
						70.71	90.91	90.91	70.71
		8.0	CSO ANB	B/5/1	V 5	>	80 CSO	ANG BI	1/N5
Section 1		10 m				>		able B	<i>v</i>
		And the second	CIRC			ζ	,-		. 🎨
water a series	and the second second second second second	Track a description				5	_		

1989 CSD NSP AT 4 Z

					••			•	.es
AGE	SH 0H 3	MALI NONSI		a va	FEMAL			UNISE	
				SMOI	K NONS	m aggr	SHOI	< NONB!	i AGGR
	97.62			77.4	8 69.4	3 71.64	93.21	78.79	83.74
1	97.05			77.80				78.25	
2	99.95			80.1	6 71.4 2	1 73.81	96.07		
3	103.04			82.66	73.5		99.04		
4	106.26			85.17	7 75.70		102.14		
5	109.65			87.86	5 7B.00		105.39		
6	113.22	92.96		90.67			108.82		
7	116.97			93.62			112.40	93.28	
	120.73		107.01	96.76	95.59	88.43	116,20		
7 .	125.09	. 102.18	110.60	99.92	88.36		120.17		
10	127.44	1AE E0	*** ***	455 55					
-11	133.77			193.29			124.32		110.45
12			118.27	106.80			128.66		114.22
13	138.65 143.45	417.21	126.44	110.44			133.14		118.11
14	148.32			114.21	100.65		137.73	113.40	122.09
			134.83	118.10	103.99		142.41	117.99	126.13
16	157.97		137.05	122.11			147.17	120.79	
17	162.69		143.29	126.16			151.74	124.55	134.33
18		135.67		130.32	114.59		156.34	128.36	138.48
19		137.69		134.61 139.04		122.83	161.91	132.23	142.68
		And the state of	101172	137.04	122.23	126.86	165.79	136.23	146.77
20	177.30		156.39	143.61	126.25	131.09	170 40	140 00	
-21	182.46	148.11	161.02	148.34	130.39	135.35	170.69 175.75	140.34 144.59	151.38 155.93
22	187.82	152.58	165.82	153.25	134.71		181.92	149.03	160.64
ି 23		157.27	176.86	158.34		144.46	186.51	153.67	165.62
- 24		162.18	176.12	163.62	143.84	149.27	192.27	158.52	170.79
25	205.48	167.33	181.64	169.0B	148.65	154.25	198.29	163.60	174.26
Zě	211.97	172.74	187.43		153.65	159.42	204.62	168.92	181.86
27	218.79	178.40	193.50	180.61	158.83	164.77	211.23	174.49	187.78
78	225.90	184.32	199.B4	186.69	164.21	170.34	218.14	180.30	173.76
.29	233.34	190.50	205.45	192.98	169.79	176.08	225.34	106.36	200.40
.30	241.06	196.93	213,33	199.49	175.56	182.94	232.83	192.65	207.09
31	247.69	203.63	220.48	204,21	181.54	188.21	240.59	199.21	214.04
32.,	257.40	210.59	227.89	213.16	187.74	194.58	248.53	206.02	221.25
33 (266.00	217.81	235.57	220.34	194.17	201.19	256.95	213.08	228.72
34	274.90	225.30	243.51	227.77	200.83	208.92	265.54	220.40	236.43
35	284.07	233.04	251.71	235.42	207.72	215.08	274,41	227.97	244.41
36	293.52	241.95	260.18	243.33	214.85	222.36			252.64
37	203.25	249.33	268.91	251 • 46	222.19	229.86	292.75	243.89	261.12
38	313.23	257.87	277.88	259.78	229.76	237.58		252.25	269.84
39	323.46	266.68	287.10	268.30	237.55	245.51	312.48	260.85	278.81
40	333.93	275.75	296.57	277.01	245.56	253.64	322.59	269.71	288.00
41	344.62	285.10	306.28	285.89	253.78	261.95			200.40 207.42
42	355.53	294.71	316.22	294.91	262.23	270.45			277.42 3 07.46
43	366.64	304.61	326.39	304.10		279.14			316.74
44	377.76	314.78	336.81	313.47	279.78	288.04			327.05
45	389.48	325.24	347.46	323.03		297.16			37.37
46	401.18	335.78	358.35	332.78	278.32	306.51	387.47		347.97
47		347.00	369.4B			316.10	378.76		50.78
48	425.18	358.31	380.87	352.91		325.94			147.84
47	437.48	J67.7 Z	392.50	343.29	328.10	336 .9 2	422.54		181-15
				19.					A Comment

Erhibit II.

1980 CSO NSP AT 4 Z

AGE	SMOK	MAL NONS		SHO	FEMAL K NONS		SHO	UNIS K NOM	ex Bh aggr
50	449.97	381.8	2 404.38	373.8	9 338.5	8 346.34	434.6	1 373.	15 392.70
51	462.68		2 416.51	384.6			446.9		
52	475.50			395.7	E.06E I	2 367.72	459.3		
53	488.45			496.9			471.8		
. 54	501.49						484.5		36 441.16
55	514.58						497.2		
→ 54 - - 57	527.71			441.6			509.9		
- 5 <i>6</i>	540.87 554.08			453.63			522.8		
59	567.34			465.85 478.45			535.7		
			J1.0100	7,017.	4 444 612	3 456.39	548.69	7 489.1	3 505.68
60	560.46	514.6	3 533.62	491.27	458.1	5 463.43	561.77	503.1	4 519.11
61	594.01	529.0		504.47			574.93	– - –	
42	607.35	543.5		517.99			588.12		
63	620.63	558.1	5 575.13	531.64			601.28		
64	633.79	572.83	589.66	575.43	514.48	518.67	614.35	569.7	
65	646.78	587.52	602.97	559.26		532.97	627.28		7 588.62
56	457.58	602.19		573.12		547.40	640.05	589.9	8 601.88
67	672.20	616.83		587.64			652.68		
48	684.68			301.07			665.20		
49	697.04	645.09	458.27	615.33	586.88	591.73	677.66	633.B	6 643.48
70	789.38	660.67	672.02	629.79	604.37	607.00	690.08	648.5	457.34
71		675.16		644.50		7.22.13.5	702.43		
72	733.35	689.30		659.30			714.65		
73.	745.00	703.41	712.57	674.07	651.78	653.84	726.66	691.8	698.73
74	756.29	717.19	725.59	688.67	667.56	667.44	738.35	705.91	712-15
75	767.18	730.57	738.23	702.99	683.14	684.85	749.6B	719.62	
76	777.58	743.55		716.99	698.48	700.02	749.5B	732.96	
77	787.52			730.66			771.07	745.94	
78	797.07	768.37		744.94			781.25	758.66	
79	803.35	780.31	705.12	757 . 19	742.95	744.01	791.20	770.99	774.12
80	815.41	792.00	796.16	770.15	757.32	758.24	600.78	783.16	785.74
81	824.25	803.40	896.97	782.89	771.44	772.24	810.61	795.07	
82	B32.33	814.49	317.50	795.36	785.23	785.92	820.94	894-67	
83	841.09	825.17	827.68	807.46	798.59	797.17	827.20	817.89	
34	848.73	835.34	337.39	817.11	811.40	811.70	838.01	828.61	827.60
85	856.32	844.76	D46.59	830.13	823.65	824.06	846.39	838.80	839.51
36	863.31	854.02	355.30	840.69	835.30	835.64	854.43	848.46	
87	870.01	862.57	863.54	850.68	R44.42	846.68	862.17	857.66	857.93
88	876.59	870.74	871.47	860.37	857.05	857.25	869.79	866.45	
89	883.02	87R.62	879.14	869.67	867.30	867.44	B77.26	874.97	875.01
70	889.47	886.37	886.72	878.96	877.26	877.36	884.80	883.36	883.33
91	896.14	B94.14	894.38	888.17	887.08	887.15	892.52	891.74	671.48
9Z	903.32	902-19	902.31	897.53	876.74	896.97	900.62	700.36	700.28
93	911.31	910.71	910.76	907.26	907.04	997.06	909.38	907.40	707.31
94	920.26	920.04	920.07	917.65	917.65	917.65	918.99	919.19	717.10
75	930.43	730.43	939.43	929.01	929.01	929.01	929.76	929.90	929.86
76	941.95	941.95	941.95	941.20	941.20	941.20	941.60	941.70	941.63
97	954.50	954.50	954.50	954.25	954.25	954.25	954.42	954.42	954.3 9 947.59
98 99	967.74	957.74	967.74	967 • 61 989 • 58	967.61 989.58	947.41 980.58	947.4 9 989.58	967.49 989.58	780.58
77	980.58	980.58	780.58	704.50	704130	, 24 1 20	,44144	, · · · ·	
LOO .		1600.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
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